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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,292	09/18/2003	Warren M. Farnworth	99-0311.3	9044
22823	7590	01/07/2005	EXAMINER	
STEPHEN A GRATTON THE LAW OFFICE OF STEVE GRATTON 2764 SOUTH BRAUN WAY LAKEWOOD, CO 80228			KOBERT, RUSSELL MARC	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,292	FARNWORTH ET AL.	
	Examiner	Art Unit	
	Russell M Kobert	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-85 is/are pending in the application.
- 4a) Of the above claim(s) 61-76 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 77-85 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0903</u> | 6) <input type="checkbox"/> Other: _____ |

1. Applicant's election of Invention II, Species 2, claims 77-85, in the reply filed on December 6, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 61-76 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention and/or Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 6, 2004.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. A good example of such a title, although not necessarily related to this specific case, could be "*Method and Apparatus for Passive Optical Characterization of Semiconductor Substrates Subjected to High Energy (MEV) Ion Implantation Using High-Injection Surface Photovoltage.*"

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 77- 83 and 85 are rejected under 35 U.S.C. 102(b) as being anticipated by Luthi et al (4329642).

Luthi et al anticipates (Figures 2 and 7-10) a contact (45) for making an electrical connection with a component contact (38) on a semiconductor component (36) comprising:

- a substrate (40) having a recess (42);

- a plurality of cantilevered leads (44) on the recess;

- a support member (72) attached to the leads for movement into the recess, the support member configured to support and electrically engage the component contact during the movement into the recess; and

- a projection (74) on the support member; as recited in claim 77.

As to claims 78, 79, 81, 83 and 85, having the movement of the support member into the recess a depth by approximately equal to the depth, the leads configured to exert a torque on the support member, the component contact comprising a bumped contact, the leads having an extensible configuration and the support member comprising a plate are considered inherent characteristics of the operation and composition of Luthi et al.

As to claim 80, the projection further comprising a blade configured to penetrate the component contact is anticipated by Luthi et al (see cross-sectional view of 74 in Figure 8).

As to claim 82 having a plurality of conductive vias in the substrate in electrical communication with the cantilevered leads is anticipated by Luthi et al (note embodiment of Figures 13 and 15, portions 84' and 86').

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luthi et al (4329642) as applied to claim 77 above, and further in view of Malhi et al (5006792).

Although Luthi et al does not explicitly disclose that the substrate is comprised of semiconductor material as described in claim 84, Malhi et al does disclose that the

Art Unit: 2829

substrate (28) of the test socket adaptor (20) is preferably constructed of silicon (a semiconductor material).

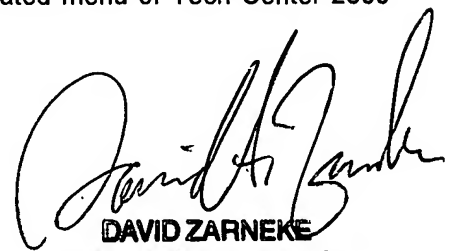
It would have been obvious to one having ordinary skill in the art to have combined the teaching of Malhi et al to that of Luthi et al to make applicants claimed invention because Malhi et al also disclose a substrate (28) having a recess with cantilever beams (32) extending into the recess for contacting a semiconductor component (22) and one having ordinary skill would have been motivated to combine the teaching of Malhi et al with that of Luthi et al because Malhi et al further suggests that "the substrate (28) is preferably constructed of silicon to match the thermal expansion rate of the chip (22)" and that "it is important to ensure that the material from which the package (30) is made has a thermal expansion rate approximately equal to that of the substrate (28) and the chip (22) to prevent cracks therebetween during temperature cycling" as disclosed at column 3, lines 14-33.

9. A shortened statutory period for response to this action is set to expire three month(s) from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kobert whose telephone number is (571) 272-1963. The Examiner's Supervisor, Nestor R. Ramirez, can be reached at (571) 272-2034. For an automated menu of Tech Center 2800 phone numbers call (571) 272-2800.



Russell M. Kobert
Patent Examiner
Group Art Unit 2829
December 29, 2004



DAVID ZARNEKE
PRIMARY EXAMINER

1/4/05